CHAPTER 31F [For SLC]
MARINE OIL TERMINALS
DIVISION 1

SECTION 3101F [SLC] - INTRODUCTION

3101F.1 General. *The Lempert-Keene-Seastrand oil spill prevention and response act of 1990 (act), as amended, authorized the California State Lands Commission (SLC) to regulate marine oil terminals (MOTS) in order to protect public health, safety, and the environment. The authority for this regulation is contained in Sections 8755 and 8756 of the California Public Resources Code. This act defines "oil" as any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues thereof, including but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oil mixed with waste, and liquid distillates from unprocessed natural gas. The provisions of this Chapter regulate marine oil terminals as defined under this act.*

3101F.2 Purpose. *The purpose of this Code is to establish minimum engineering, inspection and maintenance criteria for MOTs in order to prevent oil spills and to protect public health, safety and the environment. This Code does not, in general, address operational requirements. Relevant provisions from existing codes, industry standards, recommended practices, regulations and guidelines have been incorporated directly or through reference, as part of this Code.*

Where there are differing requirements between this Code and/or references cited herein, the choice of application shall be subject to Division approval.

In special circumstances where certain requirements of these standards cannot be met, alternatives that provide an equal or better protection of the public health, safety and the environment shall be subject to Division approval.

3101F.3 Applicability. *The provisions of this Chapter are applicable to the evaluation of existing MOTs and design of new MOTs in California. Each provision is classified as New (N), Existing (E), or Both (N/E) and shall be applied accordingly. If no classification is indicated, the classification shall be considered to be (N/E).*

Existing (E) requirements apply to MOTs that are in operation on the date this Code is adopted. For these MOTs, equivalent or in-kind replacement of existing equipment, short pipeline sections, or minor modification of existing components shall also be subject to the existing (E) requirements.

New (N) requirements apply to:

1. A MOT or berthing system (subsection 3102F.1.3) that commences or recommences operation with a new or modified operations manual after adoption of this Code.

2. Addition of new structural components or systems at an existing MOT that are structurally independent of existing components or systems

3. Addition of new (non-replacement) equipment, piping, pipelines, components or systems to an existing MOT

4. Major repairs or substantially modified in-place systems

5. Any associated major installations or modifications

3101F.4 Overview. *This Code ensures that a MOT can be safely operated within its inherent structural and equipment-related constraints*

Section 3102F defines minimum requirements for audit, inspection and evaluation of the structural, electrical and mechanical systems on a prescribed periodic basis, or following a significant damage-causing event.

Section 3103F, 3104F and 3107F provide criteria for structural loading, deformation and performance-based evaluation considering earthquake, wind, wave, current, seiche and tsunami effects.

Section 3105F provides requirements for the safe mooring and berthing of tank vessels and barges.

Section 3106F describes requirements for geotechnical hazards and foundation analyses, including consideration of slope stability and soil failure.

Section 3108F provides requirements for fire prevention, detection and suppression including appropriate water and foam volumes.

Sections 3109F through 31011F provide requirements for piping, mechanical and electrical equipment.

English units are prescribed herein; however, many of the units in the references are in System International (SI).

3101F.5 Risk Reduction Strategies. *Risk reduction strategies, such as pipeline segmentation devices,*

system flexibility and spill containment devices may be used to reduce the size of a potential oil spill. Such strategies may reduce the MOT risk classification as determined from Table 31F-4-1.

3101F.6 Review Requirements.

3101F.6.1 Quality Assurance. *All audits, inspections, engineering analyses or design shall be reviewed by a professional having the similar or higher qualifications as the person who performed the work, to ensure quality assurance. This review may be performed in-house.*

Peer review is required for nonlinear dynamic structural analyses and alternative lateral force procedures not prescribed herein. The peer review may be from an independent internal or external source. The peer reviewer shall be a California registered civil or structural engineer.

3101F.6.2 Division Review. *The following will be subject to review and approval by the Division or its designated representative(s) for compliance with this Code:*

1. *Any audit, inspection, analysis or evaluation of existing MOTs.*

2. *Any significant change, modification or re-design of a structural, mooring, fire, piping/pipelines, mechanical or electrical system at an existing MOT, prior to use or reuse.*

3. *Engineering analysis and design for any new MOT prior to construction.*

4. *Construction inspection team and the construction inspection report(s).*

Authority: Sections 8755 and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8755 and 8757, Public Resources Code.